Improving ICT Accessibility Using Standards and Legislation

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Background

- Design for All Research Group
- UK National Contact Centre for the European Design for All and eAccessibilty Network
- Masters in Digital Inclusion Module in Legislation, Regulation and Standardisation

Background

- Member of ANEC Design for All and ICT working groups
- Chair of the European Design-for-all and Assistive Technology Standardisation Co-ordination Group

Population Changes

In just a few decades, scientific progress has brought about a significant increase in life expectancy in the industrialized countries. But has the quality of life of the elderly improved along with it? As people live longer, medicine is facing a general increase in age-related illnesses, such as Alzheimer's disease and certain kinds of cancer.

RTD info - Magazine for European Research

Standards as a way of spreading good practise.

- Standards have a role in ensuring that ICT equipment and services are designed in an accessible way and are accessible in use.
- There has been a significant amount of research aimed at removing barriers to participation in the Information Society.
- Knowledge gained from this research has been codified into accessibility standards.

Standards

- Prescriptive
  ES 201 381 (December 1998) Telecommunication keypads and keyboards: Tactile identifiers.

- Design Methodology
  BS 7000-6:2005 Design management systems. Managing inclusive design guide.

- Process
  ISO 9241 The Ergonomics of Human-system Interaction Part 210: Human-centred design for interactive systems

The creation and implementation of accessible ICT depends on the involvement of ICT professionals who;

- Understand user requirements for the complete range of users.
- Know and are able to use solutions that meet user needs.
- Develop new accessibility solutions where required.
- Make a commitment to the use of accessibility solutions.

Design of New Technology

- Innovation = Research
  + Standardization/Legislation
  + Implementation

- Accessible Innovation = Relevant Research
  + Design for All Standardization/Legislation
  + Informed Implementation

Creation of Standards

Theoretical

Best Practise Knowledge

Good Useable standards

More Accessible World

Practical

Available Knowledge

Unused/Unusable Standards

No Change to World

Issues that need to be addressed

- Acquisition of best practise knowledge by User involvement – Stand4All
- Use of standards – legislation, public procurement
- Support for standards – not perfect but useful.

Knowledge - STAND4ALL

- The STAND4ALL project, funded by the European Commission, is about including the needs of people with disabilities and of old age, not only in the content of standards but also in the standardization process.

Knowledge - STAND4ALL

- STAND4ALL has the key objectives of developing and implementing training courses to promote the use of CEN/CENELEC Guide 6 “Guidelines for standards developers to address the needs of older persons and persons with disabilities” within CEN/CLC/ETSI Technical Committees.

Examples of Mandates and Legislation which drive Accessibility

- Disability Discrimination Act
- Section 508
- Draft standardisation mandate to CEN, CENELEC and ETSI in support of European accessibility requirements for public procurement of products and services in the ICT domain.

European Public Procurement

- Public Procurement is the term used to describe the purchasing of works, supplies and services by national, regional and local public bodies, including central government, local authorities, fire and police authorities, defence, health services, joint consortia of public bodies, and public and private utilities.

- The annual value amounts to around £500 billion, estimated at around 11.5% of EU Gross national product.

Why use public procurement of ICT's?

- Purchasing power of public procurers, both with respect to the range and amount of equipment bought.
- Ageing of population and increased use of ICT.
- Links to international activities, such as Section 508 (Section 508 is USA legislation which requires that Federal agencies' electronic and information technology is accessible to people with disabilities. It is currently being updated).
- There is a need to reward suppliers who produce accessible products.

Limitations and Difficulties

- Traditionally procurement legislation dealt with what to purchase rather than how to purchase it (and only with procurement over a financial limit).
- By 2010 all procurements should have the option of being carried out electronically therefore any accessibility requirements have to fit into this.
- There is a difference between conformance to an accessibility requirement and accessibility.

Mandate 376: Public Procurement of accessible ICT in Europe

"The European Commission and the European governments attach great value to an inclusive and barrier-free information society….."

The aim of the mandate M/376 is to enable the use of public procurement and practice for ICT´s to remove barriers to participation in the Information Society by disabled and older people. The mandate was given by the European Commission to the European Standards Organisations (ESOs) to come up with a solution for common requirements and conformance assessment.

Mandate 376: Phase 1 Work

- The work in CEN, CENELEC and ETSI in relation the Mandate M/376 took place in 3 technical bodies: CEN BT Working Group 185, CLC BT Working Group 101-5 and ETSI TC/HF.
- Phase 1 produces an inventory of European and international accessibility requirements and assessment of suitable testing and conformity schemes.

Mandate 376: Phase 2 Work

- Standardisation European standard (EN) Accessibility requirements for ICT domain, to be used as technical specifications ;
- Technical report (TR) listing existing technical standards ;
- Guidelines on award criteria ;
- Guidance and support material
- On line freely accessible toolkit.

Conclusion

- **Standards are a respected badge of quality** from British Standards Institute web page

- Customers look for the independent verification that technical standards provide. Certification marks earned by businesses whose products and practices consistently stand up to rigorous examination are instantly recognizable and act as respected badges of quality, safety and performance.